Remarks

Claims 13-20 are pending in the above-identified application. Claims 13, and 16 were previously amended, claims 1-12 and 15 are cancelled, claims 14 is original, and claims 17-20 were previously added.

The Examiner rejected the present claims under 35 U.S.C. 103(a).

MPEP §706.02(j) states: "To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

MPEP §2143.01 provides the following. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills,* 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination.

ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

The CCPA expressly held that there must be some logical reason apparent from the evidence of record that would justify a combination or modification of references. *In re Regel,* 188 USPQ 132 (CCPA 1975). In determining whether one of ordinary skill in the art would find it obvious to modify or combine references, the teachings of the references, taken with the knowledge that a worker in the art already possesses, constitute the scope and content of the prior art. Thus, the question raised under §103 is whether the prior art taken as a whole would suggest the claimed invention taken as a whole to one of ordinary skill in the art. Accordingly, even if all elements of a claim are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention.

The Federal Circuit has also repeatedly warned against using the applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings in the prior art. See, *e.g., Grain Processing Corp. v. American Maize-Products,* 840 F.2d 902, 907, 5 USPQ2d 1788,1792 (Fed. Cir. 1988).

The following were cited by Judge Linn in *In re Kotzab,* 217 F.3d 1365, 55 USPQ2d 1313 (Fed. Cir. 2000):

a) Hindsight Syndrome

A critical step in analyzing the patentability of claims pursuant to section 103(a) is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art,

guided only by the prior art references and the then accepted wisdom in the field. ... Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher." (Id. at 1369, 55 USPQ2d at 1316).

b) Need for Motivation

Most if not all inventions arise from a combination of old elements. ... Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. (Id. at 1369, 55 USPQ2d at 1316) (citations omitted).

c) Particular Findings Required

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather dm expressly stated in the references. ... The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. ... Whether the Board relies on an express or an implicit showing, it must provide particular

findings related thereto. Broad conclusory statements standing alone are not "evidence." (Id. at 1370, 55 USPQ2d 1317) (citations omitted).

Furthermore, if a prior art reference requires some modification in order to meet the claimed invention or requires some modification in order to be properly combined with another reference and such a modification destroys the purpose or function of the invention disclosed in the reference, one of ordinary skill in the art would not have found a reason to make the claimed modification. Thus, the CCPA had and the Federal Circuit has consistently held that when a §103 rejection is based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, such a proposed modification is not proper and the prima facie case of obviousness cannot be properly made.

The following is a summary of each of the cited prior art and an indication of the respective technical field.

Bakke teaches a redundancy manager in an I/O adapter that manages commands to peripheral devices in a computer system. These peripheral devices have multiple ports and may have a different bus associated with each port. The buses, referred to as independent pathways, moreover, need not have the same protocol. The redundancy manager determines the number of independent pathways connected to the peripheral device, presents only one logical device to the operating system and any device driver and any other command or device processing logic in the command path before the redundancy manager. For each incoming command, the redundancy manager determines which pathways are properly functioning and selects the best pathway for the command based on load balancing considerations and any ordering semantics that must be preserved in the incoming command and any outstanding commands and associated data that

have not yet executed. The redundancy manager further reroutes the command to an alternate path and resets the device for the alternate path if the selected path failed. Thus, a dynamic mechanism and method to manage multiple pathways to I/O devices such as storage disks do not require the intervention of either the operating system of the computer or any device driver associated with the device or the interconnecting bus. This invention relates generally to the field of computer processing and more specifically relates to managing multiple physical paths from a host computer system to peripheral devices.

Bakke is directed to the following problem. There is no mechanism for dynamic usage and load balancing amongst the redundant physical paths. Once a physical path has failed, moreover, the host operating system has no simple means to dynamically use alternate paths or to recover use of the failed path once it becomes available.

Davis discloses a method that includes connecting a wireless device to a network via a first connection and enabling a lower usage level for the wireless device if a throughput of the first connection is below a predetermined threshold.

Davis is directed to the following problem. [paragraph 0002] In modern networks, it is typically desired to have high bandwidths to enable large amounts of data to be transmitted quickly. Where bandwidth limitations exist or where bottlenecks in a network such as high latencies are present, data flow may be impaired. This impairment may cause applications run on various devices to operate undesirably slow or to fail entirely. [paragraph 0003] Such impairments exist particularly in low bandwidth wireless networks such as a wireless wide area network (WWAN) or a wireless local area network (WLAN). Thus a need exists to permit

devices connected to a network to communicate effectively even in low bandwidth or high latency conditions.

Kitchin discloses a way of managing bandwidth in a network supporting variable bit rate. An apparatus is provided that comprises an interface to transmit data to a receiving device. The apparatus comprises a controller that is communicatively coupled to the interface, the controller to detect a bit rate change event and transmit a first portion of the data using reserved bandwidth and a second portion of the data using unreserved bandwidth in response to detecting the bit rate change event.

Kitchin is directed to the following problem. [paragraph 0006] Typically, bandwidth agreements in WLANs that support dynamic bit rate connections are negotiated based on an assumed bit rate. If, however, the bit rate changes from the assumed bit rate, the existing bandwidth agreement may no longer be valid, thereby possibly interrupting the transfer of data. This interruption in data transfer may be problematic for applications that, for example, transmit voice, audio, video, and/or other high priority traffic. [paragraph 0007] Thus, there is a need to efficiently manage bandwidth in a network supporting variable bit rate.

Jolley discloses a multiple interface input/output port that allows communication between an interface bus of a peripheral device and any one of a plurality of different types of interface buses that may be provided in a host computer. An interface bus detection circuit detects which type of interface bus the peripheral device is connected to on the host computer, and communications are then routed through an appropriate interface adapter that enables communication between the interface buses of the peripheral device and host computer. The interface bus detection circuit compares signal levels on selected ones of the lines of the interface

bus of the host computer to a reference potential to determine which of the selected lines are grounded. The circuit then identifies the type of interface bus to which it is connected based on the determination of which of the selected lines of the interface bus are grounded.

Jolley is directed to providing a need for a multiple interface input/output port adapted for use in a peripheral device that is capable of automatically detecting the type of interface bus to which it is connected in a host computer and then routing communications between the two devices through an appropriate interface adapter, if necessary, in a manner transparent to the user. Such apparatus would eliminate the need for cumbersome adapter devices and would provide a more user-friendly operation.

The Examiner rejected claims 13-14 and 16-20 under 35 U.S.C. 103(a) as being unpatentable over Bakke (U.S. Patent No. 6,740,812 B2) in view of Davis (U.S, Pub. No. 2004/0214581 Al) in view of Kitchin (U.S. Pub. No. 2002/0154656 Al) and further in view of Jolley (U.S. Patent No. 5,832,244).

Regarding Claim 13 the Examiner alleged that Bakke teaches a method for interfacing a data capable mobile phone to at least one peripheral device [Col 6, lines 20-26 & Col 6, lines 52-55 & Col 8, lines 19-30 & Fig. 1, Items 115, 130, 132, 134, 136], comprising: providing an internal bus in the mobile phone [Col 6, lines 20-25]; providing a peripheral hub having an input that is an I/O port and at least one output that is an I/O port [Col 6, lines 61-63 & Fig. 1, Items 115, 130, 132, 134, and 136]; operatively connecting the internal bus to the input of the peripheral hub [Col 6, lines 61-63 & Col 6, lines 64-66 & Fig. 1, Items 115, 130]; operatively connecting at least one peripheral device to the at least one output of the peripheral hub [Col 6, lines 61-63 & Col 6, lines 64-66 & Fig. 1, Items 132, 134, 136]; internetworking with the internal

bus of the mobile phone to exchange data and control information with a CPU of the mobile phone [Col 6, lines 52-55]. The Examiner admits that Bakke fails to specifically teach providing an I/O interface device controller respectively for each I/O port in the peripheral hub and directing control and data from the internal bus to a corresponding interface device controller for a respective peripheral device.

The Examiner then alleged that the claimed limitation was well known in the art as taught by Davis. The Examiner alleged that Davis discloses an 110 hub providing an I/O interface device controller respectively for each I/O port in the peripheral hub [paragraph 0024 & Fig. 4, Items 340, 346] and directing control and data from the internal bus to a corresponding interface device controller for a respective peripheral device [paragraph 0024 (I/O controller controls access to one or more I/O devices)].

The Examiner then concluded that it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the hub of Bakke to incorporate the I/O controllers as taught by Davis is order to have a hub capable of controlling the devices connected to it.

The Examiner admitted that the combination fails to specifically teach storing in the peripheral hub and installing the drivers for peripheral devices connected to the peripheral hub.

The Examiner then alleged that Kitchin discloses a wireless network hub in one embodiment storing drivers in the peripheral hub and installing the drivers for peripheral devices connected to the peripheral hub [paragraph 0026 & Fig. 2].

The Examiner then concluded that it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination of Bakke and Davis to

include the storing and installing of device drivers as taught by Kitchin in order to have a peripheral hub that is not dependent on a host device for storing and installing drivers for peripheral devices.

The Examiner admitted that the combination fails to specifically teach recognizing, peripheral devices connected to the peripheral hub, separating peripheral interfaces from the internal bus and making respective peripheral interfaces available on respective peripheral device outputs of the peripheral hub.

The Examiner then alleged that Jolley discloses a multiple input/output port/adaptor capable of recognizing peripheral devices connected to it, separating peripheral interfaces from the internal bus and making respective peripheral interfaces available on respective peripheral device outputs of the port/adaptor [Col 4, lines 31-54].

The Examiner then concluded that it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination of Bakke, Davis and Kitchin to include the multiple input/output port capable of recognizing and separating different types of interfaces connected to it as taught by Jolley in order to have a peripheral hub capable of being used with a plurality of different types of interface devices.

In order to attempt to formulate a rejection of the present claims, the Examiner has had to resort to combining four prior art references. However, as described above, the four prior art references are directed to solving different problems. Solutions set forth in the references to these problems do not suggest the desirability of a combination as claimed in the present claims that renders the resultant combination obvious unless the prior art. The mere fact that the references can be combined or modified is not sufficient to maintain the rejection under 35 U.S.C. 103(a).

Accordingly, even if all elements of the claims are disclosed in the four prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill would have been prompted to combine the teachings of the references to arrive at the claimed invention. This has not been clearly explained or shown by the Examiner.

This combination of the elements of the present invention as set forth in the claims is not obvious in view of any of the cited prior art taken singly or in combination for the reasons set forth above.

Reconsideration and withdrawal of the rejections is therefore respectfully requested. In view of the above remarks, allowance of all claims pending is respectfully requested.

The prior art made of record and not relied upon is considered to be of general interest only. This application is believed to be in condition for allowance, and such action at an early date is earnestly solicited. If a telephone conference would be of assistance in advancing the prosecution of this application, the Examiner is invited to call applicant's attorney.

Respectfully submitted,

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